

El  
(Contd)

forming at least a source region and a drain region in the semiconductor island,  
wherein irradiation of laser light is performed after forming said semiconductor film.

---

Please add new claims 35-51 as follows:

---

35. A method for manufacturing a semiconductor device comprising:  
forming a semiconductor island on an insulating surface, the semiconductor island having a tapered shape, wherein the tapered shape has an angle within a range of 20° to 50° between a side thereof and an underlying surface;  
forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;  
forming a second gate insulating film over the first gate insulating film wherein the second gate insulating film comprises silicon oxide nitride;  
forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween; and  
forming at least a source region and a drain region in the semiconductor island.

36. A method for manufacturing a semiconductor device comprising:  
forming a semiconductor island on an insulating surface, the semiconductor island having a tapered shape, wherein the tapered shape has an angle within a range of 20° to 50° between a side thereof and an underlying surface;  
forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;  
forming a second gate insulating film over the first gate insulating film by using mixed gases of TEOS and N<sub>2</sub>O wherein the second gate insulating film comprises silicon oxide nitride; and  
forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween.

37.

37. A method for manufacturing a semiconductor device comprising:  
forming a semiconductor island on an insulating surface, the semiconductor island having a tapered shape, wherein the tapered shape has an angle within a range of 20° to 50° between a side thereof and an underlying surface;  
forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;  
forming a second gate insulating film over the first gate insulating film wherein the second gate insulating film comprises silicon oxide nitride;  
forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween;  
forming an interlayer insulating film over the gate electrode wherein the interlayer insulating film comprises silicon nitride; and  
forming a resin material layer over the interlayer insulating film.

38. A method for manufacturing a semiconductor device comprising:  
forming a semiconductor film on an insulating surface;  
forming a semiconductor island having a tapered shape by patterning the semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying surface;  
forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;  
forming a second gate insulating film over the first gate insulating film by using mixed gases of TEOS and N<sub>2</sub>O wherein the second gate insulating film comprises silicon oxide nitride; and  
forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween.  
wherein irradiation of laser light is performed after forming said semiconductor film.

39. A method for manufacturing a semiconductor device comprising:  
forming a semiconductor film on an insulating surface;

E

forming a semiconductor island having a tapered shape by patterning the semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying surface;

forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;

forming a second gate insulating film over the first gate insulating film wherein the second gate insulating film comprises silicon oxide nitride;

forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween;

forming an interlayer insulating film over the gate electrode wherein the interlayer insulating film comprises silicon nitride; and

forming a resin material layer over the interlayer insulating film, wherein irradiation of laser light is performed after forming said semiconductor film.

40. A method for manufacturing a electroluminescence device comprising:

forming a semiconductor island on an insulating surface, the semiconductor island having a tapered shape, wherein the tapered shape has an angle within a range of 20° to 50° between a side thereof and an underlying surface;

forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;

forming a second gate insulating film over the first gate insulating film wherein the second gate insulating film comprises silicon oxide nitride;

forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween; and

forming at least a source region and a drain region in the semiconductor island.

41. ~~A method for manufacturing a electroluminescence device comprising:~~

ED  
(contd)

E

forming a semiconductor island on an insulating surface, the semiconductor island having a tapered shape, wherein the tapered shape has an angle within a range of 20° to 50° between a side thereof and an underlying surface;

forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;

forming a second gate insulating film over the first gate insulating film by using mixed gases of TEOS and N<sub>2</sub>O wherein the second gate insulating film comprises silicon oxide nitride; and

forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween.

42. A method for manufacturing a electroluminescence device comprising:

forming a semiconductor island on an insulating surface, the semiconductor island having a tapered shape, wherein the tapered shape has an angle within a range of 20° to 50° between a side thereof and an underlying surface;

forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;

forming a second gate insulating film over the first gate insulating film wherein the second gate insulating film comprises silicon oxide nitride;

forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween;

forming an interlayer insulating film over the gate electrode wherein the interlayer insulating film comprises silicon nitride; and

forming a resin material layer over the interlayer insulating film.

43. A method for manufacturing a electroluminescence device comprising:

forming a semiconductor film on an insulating surface;

forming a semiconductor island having a tapered shape by patterning said semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying surface;

52  
(Contd)

8

forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;

forming a second gate insulating film over the first gate insulating film wherein the second gate insulating film comprises silicon oxide nitride;

forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween; and

forming at least a source region and a drain region in the semiconductor island,

wherein irradiation of laser light is performed after forming said semiconductor film.

44. A method for manufacturing a electroluminescence device comprising:

forming a semiconductor film on an insulating surface;

forming a semiconductor island having a tapered shape by patterning the semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying surface;

forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;

forming a second gate insulating film over the first gate insulating film by using mixed gases of TEOS and N<sub>2</sub>O wherein the second gate insulating film comprises silicon oxide nitride; and

forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween.

wherein irradiation of laser light is performed after forming said semiconductor film.

45. A method for manufacturing a electroluminescence device comprising:

forming a semiconductor film on an insulating surface;

forming a semiconductor island having a tapered shape by patterning the semiconductor film, said tapered shape having an angle within a range of 20° to 50° between a side thereof and an underlying surface;

EP  
(Contd)

2

forming a first gate insulating film over the semiconductor island wherein the first gate insulating film comprises silicon oxide;

forming a second gate insulating film over the first gate insulating film wherein the second gate insulating film comprises silicon oxide nitride;

forming a gate electrode over the semiconductor island with the first gate insulating film and the second gate insulating film therebetween;

forming an interlayer insulating film over the gate electrode wherein the interlayer insulating film comprises silicon nitride; and

forming a resin material layer over the interlayer insulating film, wherein irradiation of laser light is performed after forming said semiconductor film.

46. A method according to claim 1, wherein the irradiation of laser light is performed after forming the semiconductor island.

47. A method according to claim 38, wherein the irradiation of laser light is performed after forming the semiconductor island.

48. A method according to claim 39, wherein the irradiation of laser light is performed after forming the semiconductor island.

49. A method according to claim 43, wherein the irradiation of laser light is performed after forming the semiconductor island.

50. A method according to claim 44, wherein the irradiation of laser light is performed after forming the semiconductor island.

51. A method according to claim 45, wherein the irradiation of laser light is performed after forming the semiconductor island.--

47

E